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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/828,021

04/06/2001

John F. Astorino

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6386

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06/29/2004

EXAMINER

GRIER, LAURA A

SIEMENS CORPORATION
INTELLECTUAL PROPERTY LAW DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

ART UNIT

PAPER NUMBER

2644

5

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/828,021

Applicant(s)

ASTORINO ET AL.

Examiner

Laura A Grier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-20 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2 and 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the file name listed below the contents of the abstract is not permissible and should be removed. Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: page, line 27, the application number of the pending application cited has not been provided.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 18-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 18, and 19, respectively recite the limitation "said microphone". There is insufficient antecedent basis for this limitation in the claim.

Claims 18-20, respectively recites the limitation "said predetermined system condition". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-7, 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Shibata et al., U. S. Patent No. 5581619.

Regarding **claim 1**, Shibata et al. (herein, Shibata) discloses a vehicle internal noise reduction system and method. Shibata's disclosure comprises system with canceling sound means for generating a noise canceling signal (figure 1 – 8/9) , means for sensing for a system condition (figure 1 – 10), wherein noise canceling is interrupted or discontinued base of the sensed conditions (abstract, col. 4, lines 35-55, col. 7, lines 11-15, col. 8, lines 23-31).

Regarding **claim 12**, Shibata discloses a vehicle internal noise reduction system and method. Shibata's disclosure comprises system with canceling sound means for generating a noise canceling signal (figure 1 – 8/9) , means for sensing for a system condition (figure 1 – 10), wherein noise canceling is interrupted or discontinued base of the sensed conditions and the system condition relates to an engine (abstract, col. 4, lines 17-20, 35-55, col. 7, lines 11-15, col. 8, lines 23-31) and Shibata inherent indicates the system condition relates to background noise; and the relation between the background noise and engine noise as evident by the fact that the microphone is positioned in the passenger compartment of the vehicle (figure 1, and col. 4, lines 44-48), where in the microphone pickup is susceptible components location of the microphone,

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and further any noise or factors that generate noise constitutes as background noise, such as the speed/acceleration, etc.

Regarding **claim 2**, Shibata discloses everything claimed as applied above (see claim 1). Shibata discloses an engine (figure 1 – col. 4, lines 17-20), which relates to engine noise.

Regarding **claim 3**, Shibata discloses everything claimed as applied above (see claim 1). Shibata inherent indicates the system condition relates to background noise as evident by the fact that the microphone is positioned in the passenger compartment of the vehicle (figure 1, and col. 4, lines 44-48).

Regarding **claim 4**, Shibata discloses everything claimed as applied above (see claim 1). Shibata inherent indicates the system condition relates to background noise; and the relation between the background noise and engine noise as evident by the fact that the microphone is positioned in the passenger compartment of the vehicle (figure 1, and col. 4, lines 44-48), where in the microphone pickup is susceptible components location of the microphone, and further any noise constitutes as background noise.

Regarding **claim 5 and 13**, respectively, Shibata discloses everything claimed as applied above (see claim 1 and 12, respectively). Shibata indicates the system condition relating the throttle position by the fact the acceleration and deceleration of the engine is monitored.

Regarding **claim 6 and 14**, respectively, Shibata discloses everything claimed as applied above (see claim 1 and 12, respectively). Shibata indicates that system senses change of the system condition by continuous monitoring of the acceleration and deceleration of the engine

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with an engine condition judging means (figure 8), so that system is able to update itself upon interruptions.

Regarding **claim 7 and 15**, respectively, Shibata discloses everything claimed as applied above (see claim 6 and 14, respectively). Shibata indicates that a noise-canceling signal in generated by upon a change in the system via the system ability to reset and updated the filter coefficients (col. 7, lines 11-35).

Regarding **claim 8 and 16**, respectively, Shibata discloses everything claimed as applied above (see claim 1 and 1, respectively). Shibata inherently indicates recording the disablement of the noise-canceling feature as evident by the fact that filters are updated (col. 7, lines 11-65).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Everingham, U. S. Patent No. 5828759 in view of Shibata.

Regarding **claim 17**, Everingham discloses a system and method for reducing engine noise. Everingham discloses a engine with a housing (10) for receiving an air flow to the engine (abstract), which reads on an air induction means; a speaker (30), which reads on a speaker; and a microphone (42), which reads on at least one sensor (col. 2, lines 20-67). However,

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Everingham, fails to specifically disclose a control unit disabling the noise cancellation feature based upon the system condition.

Regarding the disabling the noise cancellation feature, in a similar field of endeavor, Shibata disclose a noise cancellation system wherein based a sensed condition of the system by the engine condition judging means (figure 8), the noise canceling signal output is discontinued (col. 7, lines 11-29), in which make of the components in figure 8, like the control means constitutes the system as being a control unit.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Shibata by implementing a control unit for disabling the noise canceling for the purpose of optimizing the noise cancellation technique through intelligent monitoring and control of the engine of a vehicle.

Regarding **claim 18**, Everingham and Shibata discloses everything claimed as applied above (see claim 17). Everingham and Shibata disclose a microphone for sensing the noise level.

Regarding **claim 19**, Everingham and Shibata discloses everything claimed as applied above (see claim 17). Everingham and Shibata discloses a microphone for sensing the background noise level, wherein any noise or factors which generate noise constitutes as background noise, such as an increase in speed/acceleration, vibrations of the components themselves, the air flow, etc.

Regarding **claim 20**, Everingham and Shibata discloses a microphone for sensing the noise level, and sensing the background noise level, wherein any noise or factors which generate

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noise constitutes as background noise, such as an increase in speed/acceleration, vibrations of the components, the air flow, etc.

9. Claims 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

A handwritten signature in black ink, appearing to read "Laura A. Grier". The signature is fluid and cursive, with the first name "Laura" being more prominent.

Laura A. Grier

June 26, 2004